2019

The effect of a behavioral health specialist program on providers' perceptions of mental illness, self-efficacy and satisfaction in the inpatient medical unit.

Trinity D. Thomas
trinity.thomas@uky.edu

STUDENT AGREEMENT:

I represent that my DNP Project is my original work. Proper attribution has been given to all outside sources. I understand that I am solely responsible for obtaining any needed copyright permissions. I have obtained and attached hereto needed written permission statements(s) from the owner(s) of each third-party copyrighted matter to be included in my work, allowing electronic distribution (if such use is not permitted by the fair use doctrine).

I hereby grant to The University of Kentucky and its agents a royalty-free, non-exclusive and irrevocable license to archive and make accessible my work in whole or in part in all forms of media, now or hereafter known. I agree that the document mentioned above may be made available immediately for worldwide access unless a preapproved embargo applies. I also authorize that the bibliographic information of the document be accessible for harvesting and reuse by third-party discovery tools such as search engines and indexing services in order to maximize the online discoverability of the document. I retain all other ownership rights to the copyright of my work. I also retain the right to use in future works (such as articles or books) all or part of my work. I understand that I am free to register the copyright to my work.

REVIEW, APPROVAL AND ACCEPTANCE

The document mentioned above has been reviewed and accepted by the student's advisor, on behalf of the advisory committee, and by the Assistant Dean for MSN and DNP Studies, on behalf of the program; we verify that this is the final, approved version of the student's DNP Project including all changes required by the advisory committee. The undersigned agree to abide by the statements above.

Trinity D. Thomas, Student

Dr. Evelyn Parrish, Advisor

The Effect of a Behavioral Health Specialist Program on Providers' Perceptions of Mental Illness, Self-efficacy and Satisfaction in the Inpatient Medical Unit.

Trinity D. Thomas

Lexington, Kentucky

2019

Evelyn Parrish PhD, PMHNP-BC – Committee Chair

Chizimuzo Okoli PhD, MPH, MSN, RN – Committee Member

Brandy Mathews DNP, MHA, RN, NE-BC – Committee Member/Clinical Mentor

Acknowledgements

This project would not have been possible if I had not had the expert guidance of my committee. I must acknowledge Dr. Evelyn Parrish for not only being my advisor, but my committee chair. If it had not been for your assistance, this DNP project would have not been allowed to develop to the magnitude that it has. I also must acknowledge Dr. Chizimuzo Okoli; had it not been your experience with research, I would have struggled with the quantitively portion of this project. Last, but not least, I must acknowledge Dr. Brandy Mathews; without your assistance, I would have not had the opportunity to work with the behavioral health specialists.

Table of Contents

List of Tables

List of Figures

Abstract

PURPOSE: The purpose of this DNP project was to assess the effect of a Behavioral Health Specialist (BHS) program on providers' perceptions of mental illness, self-efficacy and satisfaction in the inpatient medical unit.

METHODS: This DNP project used a mixed-methods approach to obtain data, which included a pretest-posttest design, and key informant interviews. The survey data was obtained from provider responses to an email that was forwarded from managers of four targeted medical-surgical floors. A cover letter was included in the email which further provided information about key informant interviews and the contact information for the principle investigator to arrange a time for the interview. Each participant gave verbal and written consent prior to the recorded interviews.

RESULTS: From the 3-month to the 12-month time point provider stigmatizing attitudes towards behavioral health patients significantly declined from a total score of 58.7 (SD=8.2) to 38.4 (SD=10.6). There were also significant declines in provider self-efficacy towards caring for patients with behavioral health problems across the different assessment time points. However, satisfaction scores with the BHS were also increased among providers. The key informant interviews provided impressions the nurses had of the BHS.

CONCLUSION: Despite initial beliefs and previous evidence that a BHS could increase provider self-efficacy, there was a significant decrease in self-efficacy across all assessment times. However, negative attitudes towards patents with behavioral health issues decreased and satisfaction with the BHS increased among participants.

Background and Significance

Mental illness affects one in five people in the United States of America and the majority of these people also have a comorbid physical health condition (National Institute of Mental Health [NIMH], 2015). It is estimated that 30% – 40 % of the population within an acute medical hospital has a comorbid mental illness (Lee, 2017). Research has shown that when mental health care is integrated into medical healthcare, patients are more likely to have positive outcomes (American Hospital Association [AHA], 2012). Unfortunately, despite the trend towards and positive benefits of integrating care, people with a mental illness that are admitted to an acute medical hospital can face suboptimal outcomes (AHA, 2012). The challenges of caring for individuals with mental illness in acute medical hospitals can be attributed to provider negative attitudes, staff stigma that comes with mental illness, and poor mental health literacy of healthcare personnel (Giandinoto & Edward, 2016; Giandinoto, Stephenson, & Edward, 2018).

Although medical facilities are well equipped in treating physical health problems, many professionals do not have the proper training to treat their patients' co-morbid mental illness (AHA, 2012). This lack of knowledge can lead to feelings of incompetence while providing care, resulting in anxiety and decreased self-efficacy (Giandinoto & Edward, 2016; Giandinoto et al., 2018). Thus, the effect of a behavioral health specialist (BHS) program on nurses' perceptions of mental illness, self-efficacy and satisfaction in the inpatient medical unit may help improve health outcomes for those admitted with acute medical conditions. Additionally, the BHS could improve providers' negative attitudes towards those with mental illness by increasing their self-efficacy while caring for these individuals.

Scope of the Problem

In 2017, there were 63.3 million visits to physicians' offices, hospitals and emergency departments with mental illnesses being the primary diagnosis (Center of Disease Control [CDC], 2017). The total cost of treating patients with Major Depressive Disorder (MDD), Bipolar disorder and dysthymia in 2000 was estimated at 83.1 billion dollars (Greenberg et al., 2015). Moreover, there has been a steady increase of serious psychological distress in the U.S. population from 3.3% in 1997 to 3.6% in 2016 (Cohen, Martinez & Zammitti, 2016).

Patients with co-occurring physical and mental illnesses are at a greater risk of complications in their care, because each condition is a risk factor for the other (Laderman & Mate, 2016). A mental or behavioral health condition can increase the likelihood of an exacerbation of a physical disease, while a physical illness can increase the likelihood of a mental or behavioral health exacerbation (Laderman & Mate, 2016). The increased prevalence of mental illness and the importance of integrated care has positioned many medical professionals to care for patients with comorbid mental and physical health conditions (AMA, 2012). Despite a large proportion of patients on a medical floor having co-morbid physical and mental conditions, less than 4% of these cases result in a psychiatric consultation (Laderman & Mate, 2016). This treatment gap has led to a problem of integrated behavioral healthcare incompetence, defined as a lack of knowledge or support for treating mentally ill patients among medical professionals (Giandinoto & Edward, 2016; Giandinoto et al., 2018).

Evidence Based Intervention - Behavioral Health Specialists

Many providers have negative attitudes towards those with mental illnesses, which corresponds with their low self-efficacy and mental health illiteracy (Sledge et al., 2015; Giandinoto & Edward, 2016; Giandinoto et al., 2018). In order to decrease these negative

attitudes and increase both mental health literacy and self-efficacy, evidence supports the use of a proactive approach through education and a consultation service that supports both the patient and the staff (Sledge et al., 2015; Giandinoto & Edward, 2016; Giandinoto et al., 2018). Such services are often known as consultant-liaison services or behavioral health specialist (BHS) services

Good Samaritan Hospital implemented an evidence-based BHS intervention in October 2017. Currently the BHS consists of a team of two nurses, one master's prepared and the other bachelor's prepared in nursing. With a combined experience of over 30 years, the members of this team have worked in many mental health settings across the patient's lifespan. In order to better understand the position of the BHS, the PI asked the BHS to describe their position. It was described as a "scrubs gig, but also has some admin stuff built into it"; which means the BHS are involved in patient care (scrub's gig) and have some administration roles, which can focus on financial interests. The team works closely with the behavioral health unit at Good Samaritan Hospital and conducts rounds with both mental health focused teams and medical teams on patients admitted to the medical floors. This collaboration allows the BHS the ability to communicate between the two teams to provide the best care for the patient.

Serving as a liaison between medical and behavioral health, the BHS provides multiple resources to both the providers and to the patients. Some of the resources include mini trainings for staff on how to care for individuals with mental illness diagnoses and facilitators of substance use group meetings for the patients. The nursing staff also consults the BHS to provide support in caring for patients with a mental illness. Additionally, the BHS provides resources for patients that need mental health care when they are discharged, such as rehabilitation programs. The team sees roughly 30 – 40 patients a day.

Purpose of the DNP Project

The purpose of this DNP project was to assess changes in providers' attitudes and self-efficacy in working with behavioral health clients and satisfaction with the BHS role.

The specific aims of this DNP Project were to:

1. Assess changes in providers' attitudes and self-efficacy in caring for behavioral health patients from baseline (October 2017) to 12-months (October 2018) post-implementation of a BHS role in medical floors of a hospital
2. Assess satisfaction with the BHS role among providers.
3. Explore providers' impressions on the BHS role in relation to managing behavioral health patients on medical floors.

Theoretical Framework

This DNP project was guided by Bandura's Self-Efficacy Theory (SET), which originated from the Social Cognitive Theory. SET was used to guide this DNP project because it identifies what self-efficacy is and how to increase self-efficacy among providers caring for patients with comorbid mental health and medical illness. Bandura's original research with self-efficacy in 1977 focused on identifying when coping behaviors were initiated and the factors that affected these behaviors (Bandura, 1977). Bandura (1994) defines self-efficacy as a person's "beliefs about their capabilities to produce designated levels of performance that exercise influence over events that affect their lives" (p 71). Bandura (1994) claims that if someone with high levels of self-efficacy are faced with challenging situations, they will be able to accomplish the task or learn the skill quickly; they will also be able to regain their level of confidence even after a failure. In contrast, those individuals with low self-efficacy will be more likely to avoid situations that they find challenging based on their own deficient (Bandura, 1994). Self-efficacy

is influenced by four main sources: mastery experiences, vicarious experiences, social persuasion and somatic or emotional states (Bandura, 1994).

As mentioned previously, many providers perceive that they lack the ability and knowledge to care for individuals with mental illness, this may have resulted in avoidance of such care situations and often negative attitudes towards those with comorbid mental illness (Giandinoto & Edward, 2017; Giandinoto et al., 2018; Laderman & Mate, 2016; Robb & Stone, 2016). This avoidance may be an example of low self-efficacy, which places these providers at risk of failure and feelings of inadequacy when performing their job (Bandura, 1994). However, it is expected that a BHS intervention can increase self-efficacy by using the four main sources identified by Bandura (1994), with the most successful being mastery experiences. Mastery experiences are a person's direct successes from challenges (Bandura, 1994). Vicarious experiences are described as when a person can see someone that is similar to them be successful, which enhances the confidence that they can also be successful (Bandura, 1994). Social persuasion is verbal support that a person can complete a task; while somatic and emotional states are the feelings that surround an event or task, like anxiety of fear (Bandura, 1994). Unfortunately, for many providers their care experiences with individuals with mental illness may have resulted in perceived failures. Hence, the availability of a BHS may increase providers' self-efficacy through vicarious experiences, social persuasion and improvements in somatic or emotional states.

The purpose of the BHS is to provide education and support to both the patient and staff in hopes of raising the providers own self-efficacy. The SET provides the framework to increase self-efficacy by using the BHS to provide the four influences of self-efficacy (vicarious experiences, social persuasion and somatic or emotional states). In the case of a provider that is

unfamiliar with mental illness, they would be able to request the assistance of a BHS. When that provider observes the BHS success, the provider may gain confidence in their own skills going forward. Additionally, the BHS could provide social persuasions by mental health education that would raise the providers beliefs in their abilities. In the event of caring for someone with mental illness, when experience is low, much of a provider's negative emotional responses correspond with the anxiety and fear of the unknown. The availability of a BHS may support the provider in these events and should in turn lower their emotional distress.

Review of Literature

Giandinoto et al. (2018) conducted a systematic review with a meta-analysis to examine providers' attitudes with patients that have a comorbid physical and mental illness. They concluded from 20 articles, that those patients diagnosed with mental illness were seen as dangerous, especially those that had a substance use disorder (Giandinoto et al., 2018). Additionally, it was found that these negative perceptions or stigma of mental illness did not differ between medical professionals and the general public (Giandinoto et al., 2018). Robb & Stone (2016), reported similar results in their systematic literature review showing that participants reported negative attitudes towards those with a mental illness and again ascribed danger with those with a mental illness. They also reported that medical providers would prefer to treat those with a medical illness and not a mental illness because of the negative perceptions, resulting in discrimination for those with a mental illness (Robb & Stone, 2016).

Giandinoto & Edward (2017) and Giandinoto et al. (2018) reported that negative attitudes, like mental health stigma, can be attributed to low mental health literacy. Mental health literacy is the provider's knowledge of mental health disorders and how to properly identify, assess, manage and prevent these illnesses (Giandinoto & Edward, 2017). Poor mental health

literacy can result in providers' having increased anxiety and poor self-efficacy when caring for patients with co-morbid mental and physical illnesses in acute medical settings (Giandinoto & Edward, 2017; Giandinoto et al., 2018). Moreover, according to Giandinoto & Edward (2017), low self-efficacy can result from lack of education on mental illness, feeling unprepared about the care they are able to give to their patients, and limited exposure to mental illnesses.

In contrast, providers with higher levels of education, increased health literacy, and experience with mental illness report more positive attitudes and higher levels of self-efficacy in caring for those with co-morbid physical and mental illnesses (Giandinoto & Edward, 2017; Giandinoto et al., 2018). In order to combat the negative attitudes, low mental health literacy and low self-efficacy, Giandinoto & Edward (2017) suggests providing education to providers through a mental health liaison that supports both the staff and the patient.

There have been multiple proactive psychiatric consultation services implemented with success in the medical setting. In England, Hardy & Kingsnorth (2015) implemented an educational program that provided practice nurses with training modules on how to care for those with a mental illness; at the end of the training, nurses reported a positive increased in their own knowledge and a decrease in negative attitudes. They reported that three months after the training, 65% of those that participated used the information in their regular practice and consulted the mental health nurses during certain situations they felt were out of their control (Hardy & Kingsnorth, 2015).

Sledge et al. (2015) reported on a proactive consultation service, Behavioral Intervention Team (BIT), which was implemented at Yale Hew Haven Hospital, consisting of a clinical nurse specialist (with a focus in mental health), a social worker and a psychiatrist. The BIT not only provided education to the staff, but they also provided direct patient care for complex cases

(Sledge et al., 2015). This team screened all new admitted patients and were involved in their care based on their specific needs (Sledge et al., 2015). The BIT resulted in improved patient care outcomes and high staff satisfaction; and it was concluded that the BIT was an important part of providing holistic patient care (Sledge et al., 2015).

Agency Description

This DNP project was conducted on four medical-surgical units at Good Samaritan Hospital, the smaller community-based hospital associated with the University of Kentucky (UK) Healthcare. UK Good Samaritan Hospital was founded in 1888 and includes 221 licensed beds; in 2007 UK Healthcare added the hospital to their healthcare system. UK Healthcare is dedicated to the health and wellbeing of the people of Kentucky by providing the most advanced patient care through research, clinical care and education (UKHealthcare, 2018). This DNP project is in congruence with the organization's mission to provide the best patient care through the evidenced based practice of the BHS. The BHS team will target the providers on the medical floors that have patients with comorbid physical and mental/behavioral health conditions; they will also support those same patients in their care.

Primarily, Good Samaritan serves a range of patients with medical issues and has seen a rise in mental illness diagnoses in their population. Hospital administrators have perceived the burden that the increase in mental illness among the Good Samaritan Hospital patient population has on their providers. As the main stakeholders at this facility, the administration was the driving force to support the implementation of the BHS services.

Project Design

This DNP project is a continuation of the parent project which evaluated 6-month changes in providers' attitudes, self-efficacy, and satisfaction after implementation of the BHS

program. A mixed methods design, using a pretest-posttest analysis and key informant interviews, was used to measure changes in providers' attitudes, self-efficacy and satisfaction. The evaluation will involve examining the changes in providers' attitudes, self-efficacy, and satisfaction with the behavioral health specialist role between baseline, 6-month, and 12month assessment timepoints. The key informant interviews will provide in-depth and rich information on the staff nurses' impressions of the BHS role and its impact on managing behavioral health patients on medical.

Project Methods

IRB Approval

Before this DNP project was initiated, permission was obtained through the University of Kentucky Institutional Review Board (IRB). It was determined that an expedited IRB request was required because of the cross-sectional nature of the study and the relatively small size of the key informant interviews.

Sample Population

Survey population. A survey was sent to an estimated 250 healthcare professionals that worked on medical-surgical floors at Good Samaritan Hospital between September 28th, 2018 to December 3rd, 2018. Inclusion criteria were: all full–time and provisional staff, nursing staff and advanced practice providers that are in direct patient care. Exclusion criteria were: patient care companions, part-time staff, and nursing care assistants.

Key informant interview population. Of the 250 healthcare professionals targeted for the survey, 10 registered nurses were recruited for the key informant interview. Inclusion criteria were: primarily working on a medical-surgical floor at Good Samaritan Hospital and having an

experience with the Behavioral Health Specialist team. Exclusion criteria were not being a registered nurse or not having a personal experience with the BHS.

Measures and Instruments

Demographics. Age, gender, sexual preferences, highest level of education, ethnicity/race, marital status, job role/disciplinary background, experience in current discipline, experience at Good Samaritan Hospital, experience with behavioral health education and personal experience with behavioral health problems (either themselves, a family remember or a friend). Demographics were only obtained for the survey and were excluded from the interviews to maintain confidentiality.

Provider's attitudes towards behavioral health patients. Provider's attitudes towards behavioral health patients were measured by using a modified version of the Mental Illness: Clinicians' Attitudes Scale (MICA-4), with permission obtained from Graham Thorncroft, one of the developers (Kassam et al., 2010). The MICA-4 is a 16-item self-administered questionnaire which addresses healthcare professionals' attitudes towards individuals with mental illnesses (Kassam et al., 2010). Each item consists of six statements, scored from strongly disagree (1) to strongly agree (6). Items scores are summed for a cumulative score, with a possible range of 15 to 96. For the MICA-4 scale, higher the scores indicate more negative attitudes projected by the respondent. The MICA-4 has excellent psychometric properties: it has a reliability of 0.80 (95% CI: 0.68-0.91), with an internal consistency of $\alpha = 0.79$.

Self-efficacy in caring for patients with comorbid mental and medical illnesses. Self-efficacy in caring for patients with comorbid mental and medical illnesses were measured by a 5-item investigator developed confidence scale based on Bandura's self-efficacy questionnaire (Bandura, 2006). This 5-item questionnaire was tested for reliability and demonstrated high

internal consistency at baseline (cronbach's alpha=.97) and at 6-month evaluation (chronbach's alpha =.96). Each item consists of a scale, scored from not confident at all (0) to very confident (10). Participants rated each item in terms of their perceived self-efficacy in their current practice in caring for patients with comorbid mental and medical illness. Summative item scores were calculated, with a possible range of 0 to 50, the higher the score, the higher the provider's perceived self-efficacy (Refer to Appendix B for the specific questions used).

Satisfaction with the behavioral health specialist role. Satisfaction with the behavioral health specialist role was measured by a researcher developed scale that was based on assessments similar to the Client Satisfaction Questionnaire (CSQ-8), an 8-item self-administered questionnaire which measures general satisfaction with a service (Larsen et al., 1979). Each item consists of four statements, scored from being poor (1) to being excellent (4). Participants rate each item in terms of overall satisfaction with the BHS. Item scores are summed for a cumulative score, with a possible range of 8 to 32, the higher the score, the higher the level provider satisfaction. The satisfaction with the behavioral health specialist role scale demonstrated excellent internal consistency (chronbach's alpha = .97).

Exploring staff nurses' impressions on the behavioral health specialist role. The exploration of nurses' impressions on the BHS role was assessed through a semi-structured interview containing six questions as follows:

1. Describe your experience in working with the behavioral health specialist.
2. Discuss your level of satisfaction with the support provided by the behavior health specialist.
3. Discuss your experience on the ways in which the behavioral health specialist improved your patients' hospital stay and experience in the hospital.

4. Discuss your thoughts on ways the behavior health specialist could improve your patients' experience while in the hospital.
5. Describe the barriers you encounter that would prevent you from seeking support from the behavioral health specialist for your patients.
6. Discuss your thoughts on having a behavioral health specialist available to assist with your patients.

These questions facilitated a focused discussion and obtained rich narrative information on nurses' experiences and impressions of working with behavioral health patients on medical floors as well as the behavioral health specialist role. In order to establish validity and maintain trustworthiness, Lincoln & Guba's (1985) proposed four criteria which include: credibility (confidence the findings are true), transferability (the findings would apply to other times, settings, situations and people), dependability (findings are consistent repeatable) and confirmability (findings are neutral and shaped by the participants, not the researcher's bias or prejudice). The techniques of member checking and peer debriefing was used to verify credibility (Lincoln & Guba, 1985). Member checking was achieved by having participants verify their impressions during the interview; while peer debriefing was achieved by having a member of the committee confirm the identified themes through review of the transcripts. Dependently was established by using external audits, which was achieved through the IRB and changes were not made to the procedures after approval. In order to verify transferability, the technique of thick descriptions was used, which is the use of a comprehensive description of the study to allow others to draw conclusions on whether the results can be transferred to other times, settings, situations, and people (Lincoln & Guba, 1985). Finally, confirmability was supported by using triangulation, which is using multiple data sources to produce results, audit

trail and the interview guide (Lincoln & Guba, 1985). Triangulation was completed by comparing results from the interviews (qualitative) to those obtained from the survey (quantitative); while audit trails were achieved by providing a detailed description of the steps used to obtain the results. The interview guide helped facilitate discussion without placing interviewer's bias in the participants' answers.

DNP Project Procedures

Surveys. Initially, providers were surveyed at Good Samaritan Hospital in October 2017 to obtain a baseline of nurse's attitudes and self-efficacy towards caring for behavioral health patients. They were then surveyed again at 6 months (March 2018) and 12 months (October 2018) post-implementation of the BHS. In order to maintain consistency between the data sets, surveys at each time point were identical and, were sent out to staff using the same procedures. The surveys were administered using an electronic system, Qualtrics, which was distributed to the patient care managers through departmental email. This allowed the unit managers to send the link out every two weeks as a reminder. The email that was forwarded to the staff managers contained a cover letter with details of the survey and information on voluntary participation; additionally, the email held a link for the survey. The survey took participants approximately 10 - 12 minutes to complete. Although demographic information was obtained, the data was not connected to any individual person nor to their IP address. The analysis was based on aggregating the three points of data. Finally, as survey participation was completely voluntary, it did not have any effect on participant's performance evaluations.

Key informant interviews. In addition to surveys, key informant interviews were held to discuss some nurse's impressions of and provide feedback about their satisfaction with the behavioral health specialist role. These nurses were recruited through the cover letter of the

survey and provided their contact information to the PI through email. Those that contacted the PI were requested for an interview, which was scheduled at a mutually convenient time. The key informant interviews were audio recorded. Before the interviews were initiated, the participants were supplied with their own copy of the written consent; while recording, the written consent was read to the participants. Both written and verbal consent was obtained before the semi-structured interview took place. The interviews took approximately 20 – 30 minutes and were held during dayshift hours in a private location within Good Samaritan Hospital.

Data Analysis

Surveys. The demographic data was described by using means with standard deviations for interval/ratio data and frequencies with percentages for nominal and ordinal data. Attitudes, self-efficacy, and satisfaction scores were described using means with standard deviations. Analysis of Variance Tests (with Levene's test of equality of variance) were used to examine differences in attitude, self-efficacy, and satisfaction scores by provider type at each assessment time point. In addition, changes in attitude and self-efficacy scores between baseline, 6-month, and 12-month groups were examined using analysis of variance tests (with Levene's test of equality of variance) or Kruskal-Wallis tests as appropriate. Finally, differences in individual and total satisfaction scores between 6-month and 12-month assessment points were examined using the independent t-tests (or Mann-Whitney U tests for variables that demonstrated unequal variances).

Key Informant Interviews. Data obtained through the focused interviews was analyzed using Thematic Analysis and guided by a modified version of Colaizzi's phenomenological approach (Colaizzi, 1978). Phenomenological research is a process to describe multiple peoples' lived experience and themes they had in common during the phenomenon, which would be the

implementation of the BHS (Colaizzi, 1978). Colaizzi (1978) identified six steps to analyze this data which include: familiarization, identifying significant statements, formulating meanings, clustering themes, developing an exhaustive description, producing the fundamental structure and seeking verification of the fundamental structure. The recorded interviews were transcribed verbatim into transcripts and then checked for accuracy, with any missing data or errors corrected. Following this transcription, familiarization of the transcripts was initiated by reading them multiple times in order to get a better understanding of the data. Significant statements were identified and highlighted within each transcript. These significant statements were then extracted in a word document, where they formulated meanings and were referenced back to the original transcript for context. Once meanings were identified they were then clustered into themes. An exhaustive description of all the significant statements was formulated to provide the overall experience described by the participants. This large description was then used to produce the fundamental structure, which were the essential impressions of the BHS and were placed into three categories. Lastly, Colaizzi (1978) suggests returning the essential impressions to the participants for validation; however, due to the time constraints, this project did not complete this step. Despite not performing this step, validity was established with the steps described in the measure's sections above.

Results

A total of 111 collected surveys were used for analysis, 44 at baseline, 19 at 6-month and 48 at 12-month timepoints. Surveys that were less than 50% completed were deleted from the data set. For the individual questions that were not answered, the mean or mode was used to replace the missing data. Additionally, a total of three medical staff nurses were involved in the key informant interviews.

Quantitative Results

Sample Description. On average the sample was white (81.1%), female (82.9%), between 36 – 50 years of age (43.2%), married/widowed (49.5%), and had a college education or greater (93.7%). The majority of the respondents were BSN prepared registered nurses (54.1%) and had worked an average of 75.8 months (SD = 98.9) in their discipline. Between the three assessment time points those assessed at 6-months had a significantly greater proportion of non-white participants and members of an unmarried couple as compared to the other assessment time points. There were no other demographic differences among participants across assessment time points.

Table 1: *Sample Description of the surveys*

	Total		Baseline		6 Month		12 Month	
	N	%	n	%	n	%	n	%
Age								
18 – 25 years	18	16.2	4	9.1	4	21.1	10	20.8
26 – 35 years	29	26.1	10	22.7	5	26.3	14	26.2
36 – 50 years	48	43.2	22	50.0	9	47.4	17	35.4
51 years and older	16	14.4	8	18.2	1	5.3	7	14.6
Sex								
Male	17	15.3	9	13.6	3	15.8	8	16.7
Female	92	82.9	37	84.1	16	84.2	39	81.3
Non – Binary	2	1.8	1	2.3	0	0	1	2.1
Education								
Less than a college graduate	7	6.3	1	2.3	1	5.3	5	10.4
College graduate	78	70.3	33	75	12	63.2	33	68.8
Post graduate degree	26	23.4	10	22.7	6	31.6	10	20.8
Ethnicity *								
White, Non-Hispanic	90	81.1	38	86.4	11	57.9	41	85.4
Black, Non-Hispanic	21	18.9	6	13.6	8	42.1	7	14.6
Marital Status **								
Married, living with spouse/Widow	55	49.5	25	56.8	5	26.3	25	52.1
Member of an unmarried couple	18	16.2	3	6.8	10	52.6	5	10.4
Divorced/Separated	17	15.3	7	15.9	3	15.8	7	14.5
Single, never married	21	18.9	9	20.5	1	5.3	11	22.9
Discipline								

Advanced Practice (MD/DO/Psychiatrist/APRN/PA)	11	9.9	4	9.1	4	21.1	3	6.3
Nurse (BSN)	60	54.1	23	52.3	8	42.1	29	60.4
Nurse (ADN)	40	36.0	17	38.6	7	36.8	16	33.3
	M	SD	m	sd	m	sd	m	sd
Work Tenure	75.8	98.9	55.9	89.6	71.8	97.2	95.6	105.6

Changes in Providers' Attitudes Towards Behavioral Health Patients. Figure 1 illustrates the differences in provider attitudes towards behavioral health patients at each assessment time point. At baseline advanced practice providers (m=45.5, SD = 19.9) had significantly lower MICA-4 scores as compared to ADN (m=60.9, SD = 3.3) and BSN (m=59.3, SD = 5.7) prepared RNs. However, at the 6-month and the 12-month time points there were no significant differences between provider types. In addition, from baseline to the 12-month time point provider attitudes towards behavioral health patients significantly declined from a total score of 58.7 (SD=8.2) to 38.4 (SD=10.6), *Kruskal-Wallis chi-square* = 60.9, *DF* = 2, *P* <.0001 as illustrated in figure 1 and figure 2.

Figure 1: *Differences in attitudes at each assessment time point*

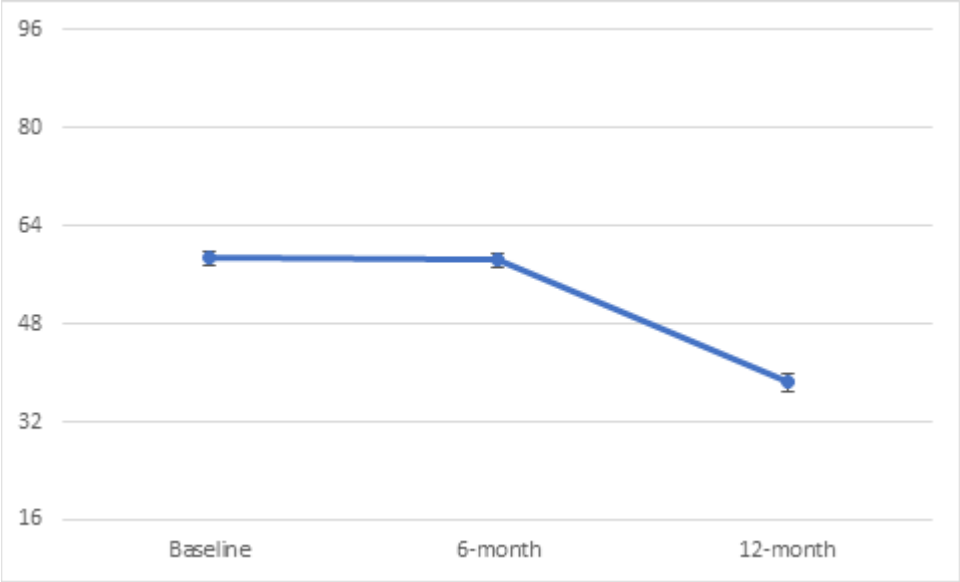
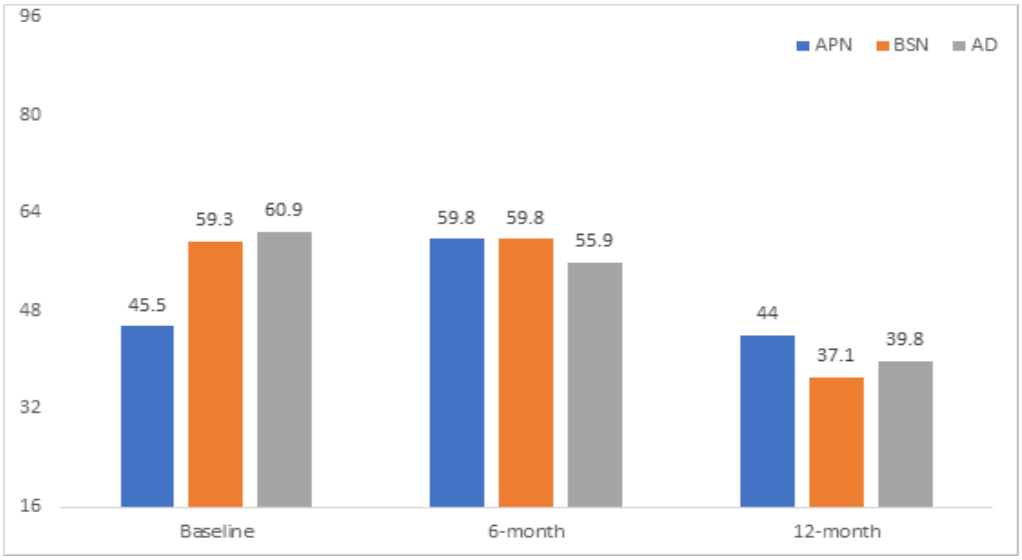


Figure 2: *Differences in attitudes towards behavioral health patients by provider type at baseline, 6-month and 12-month assessment periods*



Changes in Provider Self-efficacy Towards Caring for Behavioral Health Patients.

There were significant declines in provider self-efficacy towards caring for patients with behavioral health problems across the different assessment time points. Specifically, providers had a greater decline in their confidence in addressing their behavioral health patients' problems and assessing their readiness to address their behavioral health problem. Although provider self-efficacy in the other categories declined overall, these declines were not significant (table 2).

Table 2: *Differences in self-efficacy by assessment time points*

	Total		Baseline		6 Month		12 Month	
	m	SD	m	SD	m	SD	m	SD
Determine the degree of the patient's behavioral health problems	4.88	2.84	5.35	2.98	5.50	2.23	4.20	2.84
Discuss ways for my patient to address their behavioral health problems*	5.03	2.82	5.56	2.96	5.78	2.10	4.24	2.77
Assess my patient's readiness to address their behavioral health problems*	4.86	2.76	5.53	2.76	5.17	2.31	4.11	2.78

Recommend medication treatment options for addressing their behavioral health problems	3.89	2.77	4.16	2.95	4.89	2.91	3.20	2.52
Recommend behavioral counseling options for addressing their behavioral health problems	5.07	2.88	5.19	2.96	5.72	2.59	4.70	2.92

Satisfaction with the Behavioral Health Specialists. There were significant increases among satisfaction categories endorsed by providers. Specifically, from the 6-month to the 12-month assessment time points there were significant increases in satisfaction with BHS providing the kind of support expected, desire to consult with BHS and perceived assistance of the BHs in caring for patient needs as illustrated in table 3. In addition, the total scores in satisfaction with the BHS significantly increased from 6-month (m=18.06, sd = 5.92) to 12-month (m=20.77, sd= 1.17) assessment point, *Mann-Whitney U* = 226.0, p= .010.

Table 3: *Differences in satisfaction with behavioral health specialist at 6-month and 12-month assessment time points*

	Total		6 Month		12 Month	
	m	SD	m	SD	m	SD
How would you rate the quality of the Behavioral Health Specialist (BHS) services?	2.21	0.88	2.39	0.85	2.14	0.89
Does the BHS provide your patients the kind of support you expected? *	2.74	0.85	2.33	0.80	2.91	0.84
To what extent has the BHS services met you patients' behavioral health care needs?	2.33	0.79	2.39	0.78	2.90	0.80
If a patient required behavioral health support, would you consult with the BHS? *	2.95	1.02	1.78	0.81	3.44	0.63
How satisfied are you with the amount of support your patients are provided through the BHS?	2.74	0.83	2.44	0.86	2.86	0.80
Has receiving support from the BHS positively affected your patient's hospital stay?	2.00	0.73	2.06	0.73	1.98	0.74

In an overall general sense, how satisfied are you with the BHS?	2.20	0.83	2.39	0.85	2.12	0.82
Does your participation with the BHS assist you in caring for your patients? *	2.80	0.91	2.28	0.96	3.02	0.80
Total Score *	19.97	3.53	18.06	5.92	20.77	1.17

Qualitative Results from Key Informant Interviews

The key informant interviews were used to explore nurses' impressions on the BHS role. Three categories or impressions were identified from the three interviews. These categories included: positive impressions, negative impressions and areas of improvement.

Positive impressions. This category included two themes which were: providing holistic care to the patient population and supporting the nurse caring for the patient with mental illness.

Holistic care. One person during the interview explained that having the BHS was a way they could provide holistic care, explaining the BHS were the "extra piece that the nurses are missing with their (patient's) mental health". The same participant commented:

> "Good Samaritan holds a lot of patients that have behavioral issues, um, so we see a lot of it. And up until a year ago, and I think going forward even more, I don't think we're taking the best care of them holistically. I think we're doing great medically. Behavioral wise and their whole mental health, I don't think we're very good at. So, […] I think it's improved this last year."

The same participant also commented:

> "I think that it [BHS] definitely benefits the staff and the nurses, I know. I've worked here for almost four years, and it's… We've been battling this whole, 'I'm providing the care, but their care is way beyond what I'm doing.' It's their holistic approach that we're not doing. So, this is just a small piece that they've started working on it. And I think it's great."

Additionally, two staff nurses reported during the interview that the BHS were able to provide support to their patients in ways they couldn't. The BHS that was interviewed supported these statements by explaining that they have the time to listen to these patients that the staff nurses

might not have. According to the staff nurse, the BHS provided information on substance abuse and follow-up care related to their mental illness. One participant commented "I know a lot of the patients enjoy talking to them" and discussed that the extra time they give their patients seems to benefit the patient's outcome. Another participant commented:

> "I have called on one of them to kind of come up to maybe discuss with a patient about what they can do to kinda help with their, cravings they might be having as far as substance use patients. Um, or to kinda help give them coping mechanisms as far as some guided meditation, assistant or resources available to them upon discharge, as far as, like, substance clinics"

The same participant commented:

> "I know that a patient looks forward to meeting with that behavioral health specialist on a pretty routine basis. […] I think it's been helpful for that person. […] I think she (patient) feels like it's helping her, and it might very well be, to have that constant person to talk to."

Supporting the nurse caring for a patient with a mental illness. All three staff interviews reported that they felt the BHS team supported them in caring for their patients with mental health diagnoses, such as dementia, schizophrenia, borderline personality disorder and Bipolar Disorder. One participant stated "[they] come and a lot of times deescalate these patients, especially with our dementia population" and later commented "they have given the staff some pointers and direction on how to handle our patients with, um, psychiatric diagnosis". Another participant commented:

> "[I] needed kind of their guidance in how to best interact with the patient. Um, especially there's, um, been a couple of patients with borderline personality disorder that have really proved to have some challenges with us because they've been with us for an extended period of time. So, keeping those boundaries and not feeding into their attention seeking…having their assistance with helping guide those types of patients have been helpful."

The same participant also commented:

> "There's been other times when they've been able to come up and kinda help redirect a patient or, um… We have a patient up there now with schizophrenia that, you know,

> sometimes it's nice to have their professional…their background available to help us redirect her"

The third participant commented:

> "just last week when I was working, we had, um, a patient that is, um, bipolar, and she was in a manic phase. Um, and acting out. She was in the elevator, wouldn't get off, and yelling. Um, so [the BHS] came up pretty fast when we called […] and was able to deescalate the situation and get her back to her room, which was not working for staff ever."

Negative impressions. This category included three themes, which were: fragmented work structure, hindered patient care and focus on sitters.

Fragmented work structure. One of the interviews identified that they felt the BHS had little structure in their job. One person identified that they did not chart their encounter within SCM, this proved to be a barrier for the patient when they were being discharged. One participant commented:

> "…do not document in the EMR their visits with the patient […] my social worker is trying to get patients placed in psychiatric facilities. The psychiatric team has signed off. And then the behavioral health specialist still comes and sees the patients. But there is no documentation in the EMR. So, we're trying to send patients to psych facilities with nobody from psych following them. […] (which) become(s) a barrier to us being able to place some of our most difficult patients."

The same participant also commented "We don't really know what their plan is. So, there's a lack of communication when they go and see these folks."

Hindered patient care. Two interviews identified situations where they felt the BHS hindered the care of their patients. One situation, identified by both the interviews, was how the BHS intervened with the patients and at times they felt their support of the patient, resulted in them not supporting the nurse. One participant commented:

> "my staff have felt…have come to me and felt like the behavioral health specialist has hindered their care in the fact that, um, they've kind of thrown the staff under the bus as far as the patient is concerned or trying to deescalate a patient … And they've agreed with the patient"

Another participant supported the claim they didn't help the nurse by commenting "sometimes I wonder if they're not creating more issues" and "I feel like they feed into the patients more than what they should". They also commented:

> "I feel that the behavioral health specialists may have actually, um, created more, um…more challenges for the staff, um, by putting words in the patient's mouth that I don't know that the patient would have come up with on their own…just kind of fed into that patient's comp…you know, um, complaints or fed into their attention seeking"

Another interview identified that during certain situations the BHS claim they cannot help in a situation and in turn do not provide any additionally support to staff or the patient.

> "there's been times when I've called for help, and they're like, "Well, there's really nothing that we can really do for this person. They're…there's nothing that we can really offer differently than what you guys are already doing. In particular, I can think of a patient… I can't remember exact diagnosis, but she was becoming, um… She was escalating a little bit, becoming a little, um, agitated, a little bit, um, demanding, um, a little bit on the, um… Probably she was gonna become combative, and so I was trying to help…get assistance in what we can do to try and redirect her. And the one behavioral health specialist I was speaking with was familiar with her from past experiences and basically just said that, you know, there really wasn't a lot that…more than we could already do"

Focus on sitters (patient safety companions). Two interviews identified that their focus on sitters was a negative of the BHS role. They felt like they were being questioned about their choice to keep a sitter. One participant stated:

> "Some of the earlier days, it seemed like a lot of their focus was on whether or not patients really needed sitters or not. And, like, their focus was whether or not we should really try not having a sitter for the patient […] I remember one in particular. My patient, I'm recalling highly is that, um, there is just no way that our…myself or my nursing care tech would be able to provide the care that that patient needed that day to keep him safe. But all I kept hearing from the sitter was, 'Don't you think we could just try it.' And, 'No. I already told you no. Don't… You know, I'm not gonna keep discussing this with you.' […] I did probably get a little short. But at that point in time, I had enough other things going on. I didn't think I needed to be badgered about getting rid of a sitter when I've already told you, you know. So, that was a very dissatisfying, um, interaction"

Another participant commented: "they're being asked if they can go around and make sure we can discontinue sitters. And I don't think that's utilizing their job responsibility as much."

Despite this negative, one person that was interviewed did endorse that this negative had declined over the last year commenting "…it seems to have gotten away from that".

Areas of improvement. This category included two themes, which were: additional resources and streamlined workflow.

Additional resources. Those that were interviewed identified additional resources for both the providers and the patients. It was identified that additional resources for providers included education and more availability of the BHS. One participant mentioned that as a nurse they only received one semester of mental health and when providing care to those patients on the medical floors, their skill set was not equivalent to their medical knowledge. Their comment was "… I will say from a nurse's standpoint, we do have, like, one semester of psych, but I don't think that's near enough to help this patient population. Um, so that's how they have improved with the patient". Another participant mentioned that "more staff education" would benefit them. Two participants identified that having more BHS would benefit their patients and themselves. One participant stated, "only a limited number of them, and we have a lot of patients that probably could really use their assistance"; while another stated "just more of them". Another area of improvement was to provide more resources for the patient, either through education of group settings. One participant stated:

> "just by being available and, you know making sure that they're introducing themselves to and offering their services to, you know, pretty much all the patients… [Also] behavioral health specialists do more in the way of having some sort of scheduled services where multiple patients could attend at a time… [the] availability of having it and possibly being able to attend a meeting, if that would help their sobriety…giving them the opportunity to socialize with other people that are having similar issues in a safe environment instead of going outside to participate in conversation where it seems like a lot of, um, unhealthy things take place potentially."

Streamlined workflow. As mentioned previously, the BHS do not chart in SCM and do not provide a plan of care for the patients they see. This has left those interviewed feeling like

they are unaware of what the BHS are doing for the patient and what they could do to support the patient. One participant commented: "I think if they documented their visit and had a plan of care for these patients instead of just rounding on patients and nobody really knowing what really happened". The same participant also commented "but there needs to be some sort of documentation that an encounter existed."

Discussion

The purpose of this DNP project was to assess providers' perceptions of mental illness, self-efficacy and satisfaction in the inpatient medical-surgical unit after implementation of a BHS role. As the incidence of patients with a medical issue and a comorbid mental health issue increases, the importance of providing holistic care for these individuals is essential to their outcomes. Unfortunately, many medical providers feel they lack the knowledge to care for these patients adequately when mental illness is present. Data from this DNP project shows that implementing BHS in the acute medical setting can decrease negative attitudes and self-efficacy among staff. Moreover, staff seemed satisfied with the service overall. Qualitative interviews further enhanced the quantitative data obtained from the surveys and raised areas of the BHS that required improvement.

Providers' Attitudes Towards Behavioral Health Patients

According to Giandinoto & Edward (2017), individuals with lower levels of education were seen to have higher negative attitudes because they lacked understanding of mental illness. During the initial survey of the present study, those with lower education reported significantly higher MICA-4 scores and more negative attitudes than those with higher education and degrees. However, one year after implementation of the BHS, this substantial difference was not seen amongst the various degrees. At the 12-month assessment time-point, those with higher degrees

(advanced providers) had marginally higher MICA-4 scores than both the BSN and AD prepared nurses. This change could be attributed to the BHS being more a resource for staff nurses as opposed to other providers. Despite this finding, the overall MICA-4 scores significantly decreased from a total score of 58.7 (SD=8.2) at the 3-month time-point to 38.4 (SD=4) at the year time point.

The implementation of the BHS seemed to have decreased negative attitudes related towards mental illness. Using the interviews as support, this decrease could be attributed to the education and support the BHS provides to the staff. As the review of literature supports, low mental health literacy results in avoidant or negative attitudes towards a situation; however, when education and support are provided, these attitudes decreased over time (Giandinoto & Edward, 2017; Giandinoto, Stephenson, & Edward, 2018; Laderman & Mate, 2016).

Satisfaction and Provider Self-efficacy

Overall, satisfaction with the implementation of the BHS increased from the 3-month to the 12-month assessment time-points. At the 12-month time-point, providers reported that they felt their patients were receiving the support they expected, would consult the BHS if a patient require the BHS, and felt their own participation with the BHS assisted the care they provided to their patients.

Despite the increase in satisfaction, Larsen et al. (1979) reports that a score of 8-20 would be low satisfaction and a score of 21-26 would be a medium level of satisfaction on the CSQ-8; which would place the overall satisfaction to be low. During the interviews, participants reported a varying level of satisfaction and felt like their satisfaction had increased over the year. However, they also reported they still felt it had some improvements to make.

In contrast to satisfaction increasing, provider self-efficacy declined across all categories. Significantly, declines were seen with their confidence in addressing their behavioral health patients' problems and their readiness to address these problems. If providers feel low confidence in assessing their patient's readiness to address their behavioral health problem, then they may have low confidence in discussing behavioral health with their patient. This low confidence may explain the low results reported by providers when discussing ways to address behavioral health problems.

Using SET's sources of influence, possible reasons for the decreased self-efficacy can be identified. The items that received the highest score on the satisfaction with the behavioral health specialist scale was concerning consultation at a 3.44 and whether the assistance of the BHS helped the providers' care for their patients at a 3.02. According to this data, providers frequently consult the BHS on patients with behavioral health issues; since they offer these services, they may feel supported in caring for their patients. The BHS are seen as modeling influences that provide social persuasion and vicarious experiences, as discussed previously. Unfortunately, providers could see the BHS as very different models than themselves because of their extensive experience with behavioral health; this may result in lower levels of self-efficacy because they are unable to relate (Bandura, 1994).

During the key informant interviews, participants reported incidences where they were able to see the BHS make an impact on certain behavioral health patients; however, they also reported incidences where the BHS responded to requests for consulting by expressing, they could do nothing more for the patient. This observed "failure" by the modeling influence could undermine previous positive vicarious experiences, resulting in lower confidence levels and self-efficacy when faced with similar situations (Bandura, 1994). In contrast, participants in the

interview also identified incidences where they tried the skills taught by the BHS but were unsuccessful. However, the BHS was able to redirect a patient without issues. Since the BHS is a new program, these failures may occur when self-efficacy has not been fully established among the providers. This lack of established self-efficacy, ultimately, can decrease the providers' self-efficacy and undermine any confidence previously obtained (Bandura, 1994).

Another problem identified during the interview was incidences where providers felt the BHS undermined the staff's efforts and supported the patient in their complaint. According to Bandura (1994), this could result in providers feeling they are incompetent in caring for these patients and could result in avoiding challenging activities (like addressing behavioral health with their patients). Since they could be avoiding these incidents, they are more likely to consult the BHS (as seen above) instead of providing the care themselves. This can also be supported by the low response (1.98) concerning receiving support from the BHS positively affected your patient's hospital stay.

Implications for Practice, Education and Future Research

The results of this DNP project identified implications for practice, education and future research that could be used to better the BHS reach and to increase self-efficacy and satisfaction.

Implications for Practice and Education

Implementing the BHS decreased providers' negative attitudes towards patients with comorbid mental and medical illness. Despite the lower levels of satisfaction, the BHS improved satisfaction from the 3-month time-point to the 12-month time-point. This implies that the use of the BHS has improved the last year and has seen some benefits for continued use.

According to the data, areas of improvement were identified. During the qualitative interviews it was identified that more staff education would be beneficial to the participants

practice. Although it was reported that small trainings were provided to some staff, these trainings should be more detailed and occur more frequently. Another area of improvement would be to have the availably of the BHS increased by adding additional BHS. In addition to education provided to staff, the interviews identified that providing more educational resources for the patients would be beneficial. It was suggested that psycho-education groups be implemented to allow people to communicate in a safe environment. According to the BHS that was interviewed, this idea could be implemented soon.

The last area of improvement is to have the BHS have a more structured work schedule. This would require the BHS to provide a plan of care and document in the current charting system used by the providers. It was reported that such documentation could help social work with possible patient placement at discharge and would provide the staff with an idea of the plan of care. As reported, documentation would help during situations where they felt the BHS undermined their own efforts or only supported the patient during an event.

Future Research

Recommendations for future research would be to allow the survey and interviews to be advertised more within the enterprise to obtain more participants. The participants should also include patient care companions and nursing assistants, since they have close contact with patients and interactions with the BHS. It is also recommended that future studies allow data to be collected regarding patient outcomes. This could be measured by assessing patient satisfaction, decreased readmissions and increased compliance to a unit's milieu.

Limitations

The limitations of this DNP project included the PI holds a position within the University of Kentucky Healthcare enterprise and at times must work the floors that were included in the

project. In order to decrease any bias responses from the survey, links were not sent out directly by the PI, but were first forwarded to unit managers. Additionally, since the interviews were in person, answers could have been modified based on the interaction. In order to maintain credibility with the interviews, member checking, and peer debriefing was used along with removing any identifiable participant information. Last, the responses to the surveys and interviews were low with only 111 answering across the three assessment time points and only three agreeing to participate in a qualitative interview. The small sample size could have influenced the transferability and generalizability of the results

Conclusion

The result of this DNP project indicates that after implementation of a BHS service, providers' attitudes towards patients with behavioral health and mental health illness were improved. Additionally, provider's satisfaction increased between the 3-month and the 12-month time-points; however, satisfaction was still considered low according to the satisfaction with the behavioral health specialist scale. Despite initial beliefs, the implementation of the BHS showed a decrease in self-efficacy; using the SET, reasons for this decrease in self-efficacy were identified. In conclusion, the implementation of the BHS can decrease providers' negative feelings towards patients with comorbid mental and medical illness and result in a significant decline in self-efficacy. Future studies, using similar instruments may replicate this study in other settings to further understand the effectiveness of the BHS role.

Appendix A: *Email Cover letter*

IRB Approval
9/6/2018
IRB # 45491
ID # 58408

The effect of a behavioral health specialist program on providers' perceptions of mental illness, self-efficacy and satisfaction in the inpatient medical unit.

Introduction

You are being invited to participate in this DNP project because you provide care for patients at UK Good Samaritan Hospital and have interacted with the Behavioral Health Specialist. This study is being conducted by Trinity Thomas, RN as a DNP student at the University of Kentucky.

Why is This Research Study Being Conducted?

The purpose of this DNP project is to gain further understanding of the effect of a behavioral health specialist program, one year post implementation, on the nurses' satisfaction, perceptions of mental illness and self-efficacy in caring for patients with a behavioral or mental illness on an inpatient medical unit. Although you will not get personal benefit from taking part in this research study, your responses may help us understand more about how to support providers in caring for people with behavioral health challenges.

How Many People Will Take Part In The Study?

We hope to receive completed questionnaires from about 250 people who will take part in this study. So, your answers are important to us. Of course, you have a choice about whether or not to complete the survey, but if you do participate, you are free to skip any questions or discontinue at any time.

What Is Involved In The Study?

Study participation for this survey will take a total of approximately 10 to 12 minutes. This survey will be sent out in late September to early October 2018. The survey will ask questions about your background (your age, work history), and your experience and attitudes towards working with people who have behavioral health challenges. In addition, a set of brief questions to evaluate the behavioral health nurse services will be added to the questionnaire. All study procedures will take place at Good Samaritan Hospital.

In addition to this survey, the project will also conduct 10 key informant interviews from nursing staff. These interviews are voluntary and will consist of a set of six open-ended questions asked in person. The answers provided will be a rich source of information on how to improve the behavioral specialist team. Those interviewed should have six months experience at the Good Samaritan Hospital and with the Behavioral Health Specialist Program.

If you are interested, please contact the primary investigator at the email provided below and provide your contact information.

What Are The Benefits of Participating In The Study?

There is no direct benefit to you from participating in this study. However, it is hoped that the information gained from the study will help professionals in this field learn more about how to help people with behavioral health challenges when they are in the hospital. There are no costs to you to participate in this research.

45491
ID # 58408

What Are The Risks of Participating In The Study?

You may feel uncomfortable answering some of the questions, but you do not have to answer any question that you do not wish to. We will make every effort to keep your responses confidential and only report combined information from the survey so that no individual responses can be easily known.

What About Confidentiality?

No protected health information will be recorded other then what you provide by self-report to complete the questionnaires. Your study data will be handled as confidentially as possible. When we share the results from the study, we will write about the combined information. We will keep your name and other identifying information private. If results of this study are published or presented, individual names and other personally identifiable information will not be used. When the research is completed, your study records may be retained for use in future research. This study information will be kept for up to 6 years after the study is over. The same measures described above will be taken to protect confidentiality of this study data.

Contact Information

If you have questions about the study or would like to participate in the key informant interviews, please feel free to ask; my contact information is given below. If you have complaints, suggestions, or questions about your rights as a research volunteer, contact the staff in the University of Kentucky Office of Research Integrity at 859-257-9428 or toll-free at 1-866- 400-9428.

Thank you in advance for your assistance with this important project.

Sincerely,

Trinity Thomas, RN – DNP Candidate, University of Kentucky
E-MAIL: trinity.thomas@uky.edu

Appendix B: *Survey*

Behavioral Health Survey

Start of Block: Introduction

You are invited to participate in this survey to assess your opinions and perceived ability in providing care for patients with behavioral health challenges (e.g., mental disorders, addictions, and substance use disorders) and satisfaction with the behavioral health nurse services at Good Samaritan Hospital. The survey is completely voluntary, confidential, and you can skip any questions you do not feel comfortable answering or stop at any time. However, your complete responses will help us in understanding ways to better improve our care for patients with behavioral health challenges.

INSTRUCTIONS
1. Please follow the instructions.
2. Please read each question slowly and carefully.

End of Block: Introduction

Start of Block: SECTION A. DEMOGRAPHIC INFORMATION

A1. What is your current age?

- ○ 18 to 25 yrs (1)
- ○ 26 to 35 yrs (2)
- ○ 36 to 50 yrs (3)
- ○ 51 - 65 yrs (4)
- ○ 66 yrs or older (5)

Page 1 of 16

A2a. Are you?

- ○ Male (1)
- ○ Female (2)
- ○ Non-binary/third gender (3)

A2b. Would you consider yourself?

- ○ Straight/Heterosexual (1)
- ○ Lesbian (2)
- ○ Gay (3)
- ○ Bisexual (4)
- ○ Prefer to describe (5) _____
- ○ Prefer not to say (6)

A3. What is the highest grade or year of school you completed?

- ○ Less than high school (1)
- ○ High school graduate or GED (2)
- ○ Some college/vocational/trade school degree (3)
- ○ College graduate (4)
- ○ Post graduate degree (5)

A4. What is your ethnicity/race?

- ○ White, non Hispanic (1)
- ○ Black, non Hispanic (2)
- ○ Hispanic (3)
- ○ Asian/Pacific Islander (4)
- ○ Other (5) _____

A5. What is your marital status?

- ○ Married, living with spouse (1)
- ○ Member of an unmarried couple (2)
- ○ Divorced/separated (3)
- ○ Single, never married (4)
- ○ Other (5) _____

A6. What is your disciplinary background or job role? Are you a:

- ○ Physician (MD) (1)
- ○ Physician (DO) (2)
- ○ Psychiatrist (MD) (3)
- ○ Nurse (ADN) (4)
- ○ Nurse (BSN) (5)
- ○ Nurse (LPN) (6)
- ○ Advanced Practice Nurse (APRN/CNS) (7)
- ○ Physician Assistants (8)

A7. For how many months/years have you worked at Good Samaritan Hospital?

- ○ Months (1) _____
- ○ Years (2) _____

A8. For how many months/years have you practiced in your discipline?

- ○ Months (1) _____
- ○ Years (2) _____

A9. Which is your primary place of employment?

- ○ Chandler Hospital (1)
- ○ Good Samaritan (2)
- ○ ESH (3)

A10. Have you ever had behavioral health (i.e., mental health, substance use disorder, drug use, or addictions) treatment training?

- ○ No (1)
- ○ Yes. What type: (2) _____

A11. Have you, a family member, or close friend ever been diagnosed with a behavioral health (i.e., mental health, substance use disorder, drug use, or addictions) problem?

Check all that applies

- ☐ Yes, myself (1)
- ☐ Yes, my girl friend/boyfriend/spouse/partner (2)
- ☐ Yes, one of my parents (3)
- ☐ Yes, one of my brothers or sisters (4)
- ☐ Yes, one of my children (5)
- ☐ Yes, one of my relatives (6)
- ☐ Yes, someone else (like a close friend (7)
- ☐ No (8)

End of Block: SECTION A. DEMOGRAPHIC INFORMATION

Start of Block: Section B: Clinicians' Attitudes Scale (Adapted from the MICA-4)

In this section, we are interested in knowing about your attitudes towards individuals with behavioral health challenges. Please respond by selecting only one response. Behavioral health challenges/problems refer to mental health or addictions conditions for which an individual would be seen by a mental health or addictions professional.

	Strongly agree (1)	Agree (2)	Somewhat agree (3)	Somewhat disagree (4)	Disagree (5)	Strongly disagree (6)
I just learn about behavioral health problems when I have to, and would not bother reading additional material on it (1)	○	○	○	○	○	○
People with a severe behavioral health problem can never recover enough to have a good quality of life (2)	○	○	○	○	○	○
Working in the behavioral health field is just as respectable as other fields of health and social care (3)	○	○	○	○	○	○
If I had a behavioral health problem, I would never	○	○	○	○	○	○

Page 7 of 16

admit this to my friends because I would fear being treated differently (4)						
People with severe behavioral health problems are dangerous more often than not (5)	○	○	○	○	○	○
Health/social care staff know more about the lives of people treated for behavioral health problems than do family members or friends (6)	○	○	○	○	○	○
If I had a behavioral health problem, I would never admit this to my colleagues for fear of being treated differently (7)	○	○	○	○	○	○
Being a health/social care professional	○	○	○	○	○	○

in the area of behavioral health is not like being a real health/social care professional (8)						
If a senior colleague instructed me to treat people with behavioral health problems in a disrespectful manner, I would not follow their instructions (9)	○	○	○	○	○	○
I feel as comfortable talking to a person with a behavioral health problem as I do talking to a person with a physical illness (10)	○	○	○	○	○	○
It is important that any health/social care professional supporting a person with a behavioral health problem also ensures that	○	○	○	○	○	○

Page 9 of 16

their physical health is assessed. (11)						
The public does not need to be protected from people with severe behavioral health problems (12)	○	○	○	○	○	○
If a person with a behavioral health problem complained of physical symptoms (such as chest pain) I would attribute it to their behavioral health problem. (13)	○	○	○	○	○	○
General practitioners should not be expected to complete a thorough assessment for people with behavioral health symptoms because they can be referred to a psychiatrist	○	○	○	○	○	○

(14) I would use the terms 'crazy' or 'mad' etc. to describe to colleagues people with a behavioral health problem who I have seen in my work (15)	○	○	○	○	○	○
If a colleague told me they had a behavioral health problem, I would still want to work with them (16)	○	○	○	○	○	○

End of Block: Section B: Clinicians' Attitudes Scale (Adapted from the MICA-4)

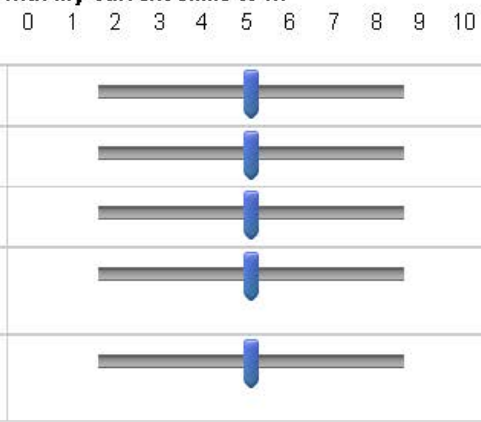
Start of Block: SECTION D. Behavioral health practices (Adapted from the 5 A's of brief interven

D1 **Please indicate how often you do the following activities based on the following scale: 1 = Never 2 = Seldom 3 = Occasionally 4= Very often In your practice/role, how <u>often</u> do you:**

	Never (1)	Seldom (2)	Occasionally (3)	Very often (4)
ASK patients whether they have a behavioral health problem (1)	○	○	○	○
ADVISE patients who have a behavioral health problem to seek help (2)	○	○	○	○
ASSESS the readiness of patients with behavioral health problems to seek help (3)	○	○	○	○
ASSIST patients with behavioral help problems by providing medications and/or counseling (4)	○	○	○	○
ARRANGE for patients with behavioral health problems to attend behavioral health (i.e., mental health, substance use, drug use, or additions) services or follow up with them with another visit? (5)	○	○	○	○
REFER patients with behavioral health problems to a qualified	○	○	○	○

behavioral health (i.e., mental health, substance use, drug use, or additions) specialist (6)

D2 **On a scale of 0-10 with 0 being "not at all confident" and 10 being "Very confident", how would you respond to, "I feel confident with my current skills to … "**



End of Block: SECTION D. Behavioral health practices (Adapted from the 5 A's of brief interven

Start of Block: SECTION E. SATISFACTION WITH BEHAVIORAL HEALTH SPECIALIST SERVICES (Adapted from

E1 How would you rate the quality of the Behavioral Health Specialist (BHS) service?

- 4. Excellent (1)
- 3. Good (2)
- 2. Fair (3)
- 1. Poor (4)

E2 Does the BHS provide your patients the kind of support you expected?

- 1. No, definitively not (1)
- 2. No, not really (2)
- 3. Yes, generally (3)
- 4. Yes, definitively (4)

E3 To what extent has the BHS service met your patients' behavioral health care needs?

- 4. Almost all of my patients behavioral health needs have been met (1)
- 3. Most of my patients behavioral health needs have been met (2)
- 2. Only a few of my patients behavioral health needs have been met (3)
- 1. None of my patients behavioral health needs have been met (4)

E4 . If a patient required behavioral health support, would you consult with the BHS?

- 1. No, definitively not (1)
- 2. No, not really (2)
- 3. Yes, generally (3)
- 4. Yes, definitively (4)

E5 How satisfied are you with the amount of support your patients are provided through the BHS?

- 1. Quite dissatisfied (1)
- 2. Indifferent or mildly dissatisfied (2)
- 3. Mostly satisfied (3)
- 4. Very satisfied (4)

E6 Has receiving support from the BHS positively affected your patient's hospital stay?

- 4. Yes, it helped a great deal (1)
- 3. Yes, it helped somewhat (2)
- 2. No, it really didn't help (3)
- 1. Quite Dissatisfied (4)

E7 In an overall general sense, how satisfied are you with the BHS?

- 4. Very satisfied (1)
- 3. Mostly satisfied (2)
- 2. Indifferent or mildly dissatisfied (3)
- 1. Quite dissatisfied (4)

E8 Does your participation with the BHS assist you in caring for your patients?

- 1. No, definitively not (1)
- 2. No, not really (2)
- 3. Yes, generally (3)
- 4. Yes, definitvely (4)

End of Block: SECTION E. SATISFACTION WITH BEHAVIORAL HEALTH SPECIALIST SERVICES (Adapted from

Appendix C: *Informed Consent for the Key Informant Interviews*

IRB Approval
9/6/2018
IRB # 45491
ID # 58409

Combined Consent and Authorization to Participate in a Research Study

KEY INFORMATION FOR THE EFFECT OF A BEHAVIORAL HEALTH SPECIALIST PROGRAM ON PROVIDERS' PERCEPTIONS OF MENTAL ILLNESS, SELF-EFFICACY AND SATISFACTION IN THE INPATIENT MEDICAL UNIT.

You are being invited to take part in this DNP project about the effect of a behavioral health specialist program on the nurses' satisfaction, perceptions of mental illness and self-efficacy in caring for patients with a behavioral or mental illness on an inpatient medical unit.

WHAT IS THE PURPOSE, PROCEDURES, AND DURATION OF THIS STUDY?

The purpose of this DNP project is to gain further understanding of the effect of a behavioral health specialist program, one year post implementation, on the nurses' satisfaction, perceptions of mental illness and self-efficacy in caring for patients with a behavioral or mental illness on an inpatient medical unit.

By doing this study, we hope to learn how those who have had interactions with the Behavioral Specialist Team view this resource and ideas that you have on how the services of the Behavioral Health Services might be improved. You will participate in a guided interview consisting of six open-ended questions which will last approximately 20 - 30 minutes. The interview will take place in an office at UK Samaritan Hospital.

WHAT ARE REASONS YOU MIGHT CHOOSE TO VOLUNTEER FOR THIS STUDY?

There is no direct benefit to you from participating in this study. However, the information obtained will help other healthcare providers in caring for hospitalized patients with behavioral and mental health issues. There are no costs to you to participate in this research.

WHAT ARE REASONS YOU MIGHT CHOOSE NOT TO VOLUNTEER FOR THIS STUDY?

The potential risks of participating in the key informant interviews are minimal. The potential for a breach in confidentiality has to be considered because your interviews will be recorded and the number of individuals being interviewed is small. This small sample could result in data collected being linked to your person. In order to maintain your confidentiality, data from this interview will be coded so your name is not associated with your responses. When we write about the results from the study, we will write about the combined information. We will keep your name and other identifying information private.

DO YOU HAVE TO TAKE PART IN THE STUDY?

If you decide to take part in the study, it should be because you really want to volunteer. You will not lose any services, benefits or rights you would normally have if you choose not to volunteer.

WHAT IF YOU HAVE QUESTIONS, SUGGESTIONS OR CONCERNS?

The person in charge of this project is Trinity Thomas , a DNP candidate of the University of Kentucky. She is being guided in this DNP Project by Evelyn Parrish, PhD (Advisor). If you have questions, suggestions, or concerns regarding this study or you want to withdraw from the study her contact information is: email:trinity.thomas@uky.edu; phone number: (270) 590-5356

If you have any questions, suggestions or concerns about your rights as a volunteer in this research, contact staff in the University of Kentucky (UK) Office of Research Integrity (ORI) between the business hours of 8am and 5pm EST, Monday-Friday at 859-257-9428 or toll free at 1-866-400-9428.

45491
ID # 58409

DETAILED CONSENT:

ARE THERE REASONS WHY YOU WOULD NOT QUALIFY FOR THIS STUDY?

You could be exclude from these key informant interviews if you are not a registered nurse on the four medical-surgical floors at UK Good Samaritan Hospital or have personally experience with the Behavioral Specialist Program.

WHERE IS THE STUDY GOING TO TAKE PLACE AND HOW LONG WILL IT LAST?

The research procedures will be conducted at UK Good Samaritan Hospital. You will need to come 1 time during the study for the interview. The total amount of time for the interview will be 20 – 30 minutes.

WHAT WILL YOU BE ASKED TO DO?

As a participant you will be asked to participate in a guided discussion using six pre-selected opened end questions. These questions will provide rich quality information about the Behavioral Specialist Team resource provided to you. This information will be used as a supplement to the survey you have already completed about the resource. The key informant interview will be a one time event, located at the UK Good Samaritan Hospital and will last 20 – 30 minutes.

WHAT ARE THE POSSIBLE RISKS AND DISCOMFORTS?

There is always a chance that any medical treatment can harm you. The research treatments/procedures in this study are no different. In addition to risks described in this consent, you may experience a previously unknown risk or side effect.

WILL YOU BENEFIT FROM TAKING PART IN THIS PROJECT?

You will not get any personal benefit from the project.

WHAT WILL IT COST YOU TO PARTICIPATE?

If you choose to participate, it will cost 20 – 30 minutes of your time. There is no financial cost to you.

WHO WILL SEE THE INFORMATION THAT YOU GIVE?.

When we write about or share the results from the study, we will write about the combined information. We will keep your name and other identifying information private. We will make every effort to prevent anyone who is not on the research team from knowing that you gave us information, or what that information is. Electronic data obtained from the survey will be coded to exclude participants names; it will be stored on password protected accounts of the PI. Physical data (tapes of the interviews, any notes taken and informed consent) obtained from the qualitative interviews will be stored in a lock filing cabinet in room 517 CON Building Lexington, KY 40536. All data will be kept for 6 years after the completion of the survey and will be destroyed per UKHealthcare's policy.

We will make every effort to safeguard your data, but, the security of data obtained through commercial survey companies cannot be guaranteed. It is also possible the data collected for research purposes may be used for marketing or reporting purposes by the company, depending on the company's Terms of Service and Privacy policies.

REDCap is a secure, web-based program to capture and store data at the University of Kentucky. Please be aware, while we make every effort to safeguard your data once received on servers via REDCap, given the nature

of online surveys, as with anything involving the Internet, we can never guarantee the confidentiality of the data while still en route to the server.

CAN YOU CHOOSE TO WITHDRAW FROM THE STUDY EARLY?

You can choose to leave the study at any time. You will not be treated differently if you decide to stop taking part in the study.

If you choose to leave the study early, data collected until that point will remain in the study database and may not be removed.

ARE YOU PARTICIPATING, OR CAN YOU PARTICIPATE, IN ANOTHER RESEARCH STUDY AT THE SAME TIME AS PARTICIPATING IN THIS ONE?

You may take part in this study if you are currently involved in another research study. It is important to let the investigator/your doctor know if you are in another research study. You should discuss this with the investigator/your doctor before you agree to participate in another research study while you are in this study.

WHAT ELSE DO YOU NEED TO KNOW?

If you volunteer to take part in this study, you will be one of about 10 people to do so.

The principle investigator is a DNP student in the College of Nursing at the University of Kentucky and will be completing this project to obtain her degree. She is being guided in this project by Evelyn Parrish (Advisor). There may be other people on the research team assisting at different times during the study.

FUTURE USE OF THE INFORMATION YOU PROVIDE:

Identifiable information such as your name, medical record number, or date of birth may be removed from the information collected in this project. After removal, the information may be used for future research or shared with other researchers without your additional informed consent.

The Researchers may use and share your health information with:

The University of Kentucky's Institutional Review Board/Office of Research Integrity; Law enforcement agencies when required by law; University of Kentucky representatives; UK Hospital and Other consultants involved with this research.

45491
ID # 58409

INFORMED CONSENT SIGNATURE PAGE

You are a participant or are authorized to act on behalf of the participant. This consent includes the following:

- **Key Information Page**
- **Detailed Consent**

You will receive a copy of this consent form after it has been signed.

_____ _____
Signature of research subject *or, if applicable,* **Date**
**research subject's legal representative*

_____
Printed name of research subject *and, if applicable,*

_____
**Printed name of research subject's legal representative*

**If applicable, please explain Representative's relationship to subject and include a description of representative's authority to act on behalf of subject:*

_____

_____

_____ _____
Printed name of [authorized] person obtaining informed consent/HIPAA authorization Date

_____
Signature of Principal Investigator or Sub/Co-Investigator

References

American Hospital Association (AHA). (2012). Bringing behavioral health into the care continuum: Opportunities to improve quality, costs, and outcomes. Washington, DC: AHA.

Bandura, A. (1977). Self-efficacy: toward a unifying theory of behavioral change. *Psychological Review, 84*(2), 191.

Bandura, A. (1994). Self-efficacy. In V. S. Ramachaudran (Ed.), Encyclopedia of human behavior (Vol. 4, pp. 71-81). New York: Academic Press. (Reprinted in H. Friedman [Ed.], Encyclopedia of mental health. San Diego: Academic Press, 1998).

Centers for Disease Control and Prevention. (2017). Mental Health. Retrieved from https://www.cdc.gov/nchs/fastats/mental-health.htm

Cohen, R. A., Martinez, M. E., & Zammitti, E. P. (2016). Early release of selected estimates based on data from the National Health Interview Survey. National Center for Health Statistics.

Colaizzi, P. (1978). Psychological research as a phenomenologist views it. In: Valle, R. S. & King, M. (1978). Existential Phenomenological Alternatives for Psychology. Open University Press: New York.

Edward, K. L., & Welch, T. (2011). The extension of Colaizzi's method of phenomenological enquiry. *Contemporary nurse*, *39*(2), 163-171.

Gerrity, M. (2016). Evolving models of behavioral health integration: Evidence update 2010–2015. *New York, NY: Milbank Memorial Fund*.

Giandinoto, J. A., & Edward, K. L. (2016). The Experience of Mental Health Literacy in Health Professionals in Non-Mental Health Areas. *International Journal of Health, Wellness & Society*, *6*(2).

Giandinoto, J. A., Stephenson, J., & Edward, K. L. (2018). General hospital health professionals' attitudes and perceived dangerousness towards patients with comorbid mental and physical health conditions: Systematic review and meta-analysis. *International journal of mental health nursing*, *27*(3), 942-955.

Greenberg, P. E., Fournier, A. A., Sisitsky, T., Pike, C. T., & Kessler, R. C. (2015). The economic burden of adults with major depressive disorder in the United States (2005 and 2010). *The Journal of Clinical Psychiatry, 76*(2), 155-162.

Hardy, S. A., & Kingsnorth, R. (2015). Mental health nurses can increase capability and capacity in primary care by educating practice nurses: An evaluation of an education programme in England. *Journal Of Psychiatric & Mental Health Nursing, 22*(4), 270-277. doi:10.1111/jpm.12208

Kassam, A., Glozier, N., Leese, M., Henderson, C., & Thornicroft, G. (2010). Development and responsiveness of a scale to measure clinicians' attitudes to people with mental illness (medical student version). *Acta Psychiatrica Scandinavica, 122*(2), 153-161.

Labaree, R. V. (2013). Organizing your social sciences research paper: Limitations of the study.

Laderman, M., & Mate, K. S. (2016). Behavioral health integration in acute medical settings: An opportunity to improve outcomes and reduce costs. *Joint Commission journal on quality and patient safety*, *42*(7), 331-336.

Larsen, D. L., Attkisson, C. C., Hargreaves, W. A., & Nguyen, T. D. (1979). *Assessment of client/patient satisfaction: development of a general scale. Evaluation and program planning, 2*(3), 197-207.

Lee, H. (2017). Yale Behavioral Intervention Team (BIT) Model study: Results from the Two-year Implementation of a Proactive CL Psychiatric Service at the Yale New Haven Hospital. *Journal of Psychosomatic Research, 97*, 157-158.

Lincoln, Y. S. & Guba, E.G. (1985). *Naturalistic inquiry*. Beverly Hills, CA: Sage Publications

National Institute of Drug Abuse [NIDA] (2015). Nationwide Trends. Retrieved from https://www.drugabuse.gov/publications/drugfacts/nationwide-trends

Robb, J., & Stone, J. (2016). Implicit Bias toward People with Mental Illness: A Systematic Literature Review. *Journal of Rehabilitation*, *82*(4).

Sledge, W. H., Gueorguieva, R., Desan, P., Bozzo, J. E., Dorset, J., & Lee, H. B. (2015). Multidisciplinary proactive psychiatric consultation service: impact on length of stay for medical inpatients. *Psychotherapy and psychosomatics*, *84*(4), 208-216.